Figure 1

Port 0 60_0
| Priority Reg. |

Port 1 60_1
| Priority Reg. |

Port 2 60_2
| Priority Reg. | ...

MAC	Port	VLAN	Priority	Port Vector
				←72
⋮				

72a   72b   72c   72d   72e 68a

$70a$ — | Switching Logic (Layer 2) |

`62a

| Port Vector FIFO |

Figure 2A

| OQ_0 | OQ_1 | OQ_2 |

66_0

| OQ_0 | OQ_1 | OQ_2 |

66_1

| OQ_0 | OQ_1 | OQ_2 | ...

66_2

| Port 0 |

20_0

| Port 1 |

20_1

| Port 2 | ...

20_2

Port 0 60_0
| Priority Reg. |

Port 1 60_1
| Priority Reg. |

Port 2 60_2
| Priority Reg. | ...

MAC	IP	Port	VLAN	Priority	Port Vector
					← 72
⋮					

72a 72f 72b 72c 72d 72e 68b

706 — | Switching Logic (Layer 2/3) |

62 b

| Port Vector FIFO |

Figure 2B

| OQ_0 | $OQ1$ | $OQ2$ |

66_0

| $OQ0$ | $OQ1$ | $OQ2$ |

66_1

| $OQ0$ | $OQ1$ | $OQ2$ | ...

66_2

| Port 0 |

20_0

| Port 1 |

20_1

| Port 2 | ...

20_2

Program Port Filter(s) with User-Selectable Attribute(s) (SA (MAC or IP), DA (MAC or IP), Ingress Port, and/or Pattern to ID Data Flow) — 100

Program Switch Module with User-Defined Switching Policy (e.g., priority queue(s), guaranteed latency) based on User-selected attribute — 102

— 104

N Attribute Detected by Port Filter?

Normal Switching

106

Notify Switching Module of Detected Attribute 108

Switch Data Packet According to User-Defined Switching Policy (Independent of Layer 2 Priority Tag) — 110

Figure 3